

ABSTRACT OF THE DISCLOSURE

5 An optical demultiplexing system demultiplexes a multiplex which has at least three levels of granularity and includes  $m$  interleaved bands of wavelengths each of which includes  $p$  wavelengths. The system includes a 1-to- $m$  deinterleaving demultiplexer for demultiplexing the multiplex into  $m$  bands of wavelengths and a 1-to- $p$  deinterleaving demultiplexer for demultiplexing each of the  $m$  bands into  $p$  wavelengths. The numbers  $m$  and  $p$  are mutually prime.